

FINAL ENVIRONMENTAL ASSESSMENT

**WATERFOWL HUNTING PROGRAM
STONE LAKES NATIONAL WILDLIFE REFUGE**

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U.S. Fish and Wildlife Service
1624 Hood-Franklin Road
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Under the Authority of the
Fish and Wildlife Act of 1956
National Wildlife Refuge System Administration Act of 1966
National Wildlife Refuge System Improvement Act of 1997

Section I: PURPOSE AND NEED FOR ACTION

Introduction

This Draft Environmental Assessment (EA) evaluates the environmental effects of three alternatives for providing a waterfowl hunting program on the Stone Lakes National Wildlife Refuge (NWR or Refuge). Pursuant to the National Environmental Policy Act (NEPA) of 1969, this draft EA will be used by the U.S. Fish and Wildlife Service (Service) to evaluate whether the effects on the quality of the human environment from the Proposed Action would be significant.

Purpose of Proposed Action

The Service proposes to offer a waterfowl hunting program (See Waterfowl Hunt Plan) on the South Stone Lake unit of the Refuge that would emphasize recreational opportunities for youth and mobility-impaired hunters as well as the general public. The purposes of the Refuge are listed below and were defined by a number of acts of Congress, granting the Service authority to acquire lands for the National Wildlife Refuge System (NWRS). A hunting program and management of habitats for migratory birds in the vicinity of South Stone Lake would be consistent with the 1st, 2nd, and 4th Refuge purpose:

- "...for the development, advancement, management, conservation, and protection of fish and wildlife resources..." 16 U.S.C., Subpart 742f (a)(4);
- "...for the benefit of the United States Fish and Wildlife Service, in performing its activities and services..." 16 U.S.C., Subpart 742(b)(1) (Fish and Wildlife Act of 1956);
- "...to conserve (A) fish and wildlife which are listed as endangered species or threatened species... or (B) plants..." 16 U.S.C., Subpart 1534 (Endangered Species Act of 1973); and
- "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds..." 16 U.S.C., Subpart 715-715y (Migratory Bird Conservation Act).

Need for Proposed Action

Beginning in 1994, the Service has acquired management responsibility of approximately 6,069 acres within the approved boundary of the Refuge using a variety of approaches, including: cooperative agreements and acquisition of conservation easements and fee title interest (Figure 1). Lands under Service management in the vicinity of South Stone Lake, Sun River, Lodi Gun Club, and Lewis Investment Company (LIC), have great potential to support a variety of wildlife-dependent recreational uses, including waterfowl hunting, in a key location close to transportation corridors (e.g., Lambert Road, Interstate-5) (Figure 2). Two properties, Sun River and Lodi Gun Club, were privately-owned duck hunting clubs prior to acquisition by the Service.

The National Wildlife Refuge System Improvement Act of 1997 stated that wildlife-dependent recreational uses such as hunting, when compatible with the purposes of the Refuge and mission of the NWRS (see Compatibility Determination), should be given priority consideration over non-wildlife-dependent recreational uses. Due to inquiries and interest from state agencies, a number of private organizations (e.g., California Waterfowl Association, Ducks Unlimited), and

the general public, this use is being considered separately from the ongoing Refuge Comprehensive Conservation Planning (CCP) process. All other proposed secondary uses on the Refuge will be evaluated as part of the CCP.

This proposed project and expansion of visitor use programs would contribute directly to the 6th interim goal established in the Final Environmental Impact Statement (FEIS), establishing the approved Refuge boundary (USFWS 1992):

- (1) provide for a diverse assemblage of native Central Valley plant communities and their associated fish, wildlife, and plant species;
- (2) protect, enhance, and restore habitat to maintain and assist in the recovery of rare, endangered, and threatened plants and animals;
- (3) preserve, enhance, and restore Central Valley wetlands to provide foraging and sanctuary habitat needs for migratory waterfowl and other waterbirds;
- (4) create linkages between Refuge habitats and habitats on adjacent lands to reverse past impacts of habitat fragmentation on wildlife and plant species;
- (5) coordinate management activities with other agencies and organizations to maximize the effectiveness of Refuge contributions to regional habitat needs;
- (6) **provide for environmental education, interpretation, and fish and wildlife oriented recreation in an urban setting accessible to large populations; and**
- (7) recognize the importance of flood storage as an important benefit and natural component of the Stone Lakes basin ecosystem.

Moreover, proposed establishment of a waterfowl hunting program on the 537-acre Sun River site in the South Stone Lake Unit, which will soon be transferred in fee title to the Refuge, would be consistent with the nature of the habitat restoration funding provided by California Wildlife Conservation Board (WCB) to the current landowner (i.e. American Land Conservancy). Specifically, the WCB funds were intended to conserve, manage, and restore fish, wildlife, and plants and develop opportunities for wildlife-dependent visitor uses, including hunting, fishing, wildlife observation, photography, environmental education, and interpretation.

Relationship with other Planning Efforts

In 1992, the FEIS for the establishment of Stone Lakes NWR was finalized (USFWS 1992). That planning process identified the approved refuge boundary and authorized the Service to work with willing landowners to create the Refuge through cooperative agreements, memoranda of understanding, or acquisition of easement or fee title interest. The FEIS describes the goals of the Refuge as enhancing and recreating a variety of plant, fish, and wildlife habitats native to the Stone Lakes Basin and the Sacramento San Joaquin Delta for the benefit of migratory birds, special status species, and to provide wildlife-dependent recreational opportunities.

In 2002, the Service began the planning process for preparation of a Comprehensive Conservation Plan (CCP) for the Refuge. When completed, this plan will outline Refuge goals, objectives, and management strategies for habitat restoration and management and visitor use programs on the Refuge. The results of the multi-year CCP planning effort will guide overall Refuge management for the next 15 years and should be completed in 2005.

Because planning for expanding visitor use opportunities on the Refuge predates the initiation of the Refuge CCP and due to inquiries from state agencies, private organizations, and the public, the Service is opting to move forward on preparing this draft EA in advance of completion of the CCP. Other recreational uses that the Service will be evaluating as part of the CCP include: fishing, wildlife observation, photography, environmental education, interpretation, and boating.

One of the sites that could support this proposed waterfowl hunting program and other wildlife-dependent recreational uses, is the Sun River property which the Service anticipates receiving from the American Land Conservancy (ALC) during winter 2004-05. ACL received funding from the WCB to restore fish and wildlife habitats and develop a variety of visitor facilities on the Sun River property. Sun River would be a suitable site for a waterfowl hunting program, assuming this use is found to be compatible with the purposes of the Refuge and the mission of the NWRS.

Decisions to be Made

Based on the analysis documented in this draft EA, the Manager of the Service's California-Nevada Operations Office must select one of the identified alternatives for implementation and determine whether the selected alternative would have any significant effects on the quality of the environment.

Scoping Process and Public Involvement

Refuge staff have met with a number of stakeholders to discuss this proposed waterfowl hunting program including, nearby private landowners: John Baranek, Manual Correia, Chris Fulster, Tom Herzog, Walt Hoppe, LaRue Schock, Mark Serra, and Galen Whitney and; Sacramento County Supervisor Don Nottoli, U.S. representative Mike Thompson and former representative Doug Ose; Sacramento County Planning Department; Sacramento County Department of Water Resources; Reclamation District 813; Ione Band of Miwok Indians; Wildlands, Inc.; and California Waterfowl Association.

A wide variety of issues, concerns, and opportunities related to proposed recreational activities on the Refuge were also identified during the public scoping process for the Refuge CCP, held during September-October 2002. At four public meetings in Walnut Grove, Elk Grove, Sacramento, and Davis, attended by a total of 137 participants, the Service received a wide range of input from private citizens, organizations, and agencies regarding future visitor use scenarios for the Refuge. Two additional planning updates were issued to inform the public about the scoping workshops and to update them on the results of the meetings. During the CCP scoping meetings and as part of the planning updates, information was provided and feedback was solicited regarding visitor uses under consideration for the Refuge.

In addition, Refuge staff convened a Visitor Services Review during December 4-7, 2002. This review was done to assist with preparation of the Refuge CCP and was made up of Refuge staff and staff from several other refuges, the Portland Regional Office, and local Service planning staff. During this exercise, a number of habitat and visitor use management alternatives were

discussed and considered for the Refuge.

Interested individuals, organizations, and agencies were notified by mail on approximately November 17, 2004 regarding a 30-day comment period to review the draft EA, Waterfowl Hunt Plan, and Compatibility Determination for Waterfowl Hunting. To facilitate public review, all of these draft documents were accessible on the Refuge website (<http://stonelakes.fws.gov>) and at local libraries. Copies were also provided upon request.

A total of 18 comments were received by phone, mail and e-mail. Comments received by phone equaled seven in favor of a hunting program and two opposed to any hunting. Comments received by mail and e-mail totaled seven in favor of hunting and two opposed. Most comments in favor of hunting requested expanding the program to three days and/or all day rather than half day, increasing the number of blinds and allowing hunters to refill and including other hunting such as dove, quail, pheasant. Those opposed to hunting felt the Refuge should remain as a sanctuary and be available for non consumptive uses (i.e. bird watching, hiking). The topic of hunting on the Refuge was also discussed in various chat forums including Elk Grove Online, DuckHunters.org, and refugeforums.com.

In response to comments received, hunting opportunities were expanded to three days per week after the first Saturday in December and the total number of hunters increased from a minimum of 12 to 22 hunters per day to a minimum of 14 to 26 hunters per day. All parties commenting on the EA will be notified through direct mailing that the Finding of No Significant Impact is available upon request and posted on the Refuge website.

Issues and Concerns

As a result of the scoping process for this proposed visitor use program, a number of issues were identified for analysis in this draft EA:

Vegetation and Wildlife

- Hunting could lead to declines in the numbers of waterfowl using the refuge either through depletion of wintering populations or displacement of birds.
- Waterfowl hunting on the Refuge could cause flushing of other migratory and resident birds from hunt areas.
- Hunting could result in either inadvertent or intentional take of non-target species.
- Hunting could encourage management of wetlands exclusively for the benefit of game species to the detriment of non-game species.

Cultural Resources

- Increasing visitor use on the Refuge could lead to impacts to historic properties in hunting areas.

Economic Considerations

- Increased visitor use could generate additional revenues for local businesses.
- Administering visitor use and associated improvements could lead to increases in

- management capability and staffing for the Refuge.
- Management costs for the Refuge after implementation of the proposed activity may exceed the management budget of the Refuge.

Land Use

- Authorizing a hunt program on the Refuge would be continuing a traditional land use on 941 acres of Service-managed lands.

Social Considerations

- Expanded visitor access to the Refuge could lead to either increased or decreased illegal activities (e.g., vandalism, littering, shooting, poaching) that could impact the Refuge or nearby landowners.

Section II: ALTERNATIVES INCLUDING THE PROPOSED ACTION

This section presents three reasonable alternatives under consideration by the Service for waterfowl hunting in the South Stone Lake area (Sun River, Lodi Gun Club, and LIC properties) of Stone Lakes NWR. The three alternatives are all considered to contribute to the visitor use goals for the Refuge (USFWS 1992). The three alternatives considered include: (1) Alternative A - No Action; (2) Alternative B - Waterfowl Hunt Program - Youth and Mobility-Impaired Opportunities Emphasized (Proposed Action); and (3) Alternative C – Maximum General Public Hunting.

Alternative A - No Action

Under this alternative, the Service would continue to manage Stone Lakes NWR as it has in the recent past. No hunting program currently exists or would be initiated on the Refuge. As part of the Refuge CCP process, the Service will consider accommodating other wildlife-dependent recreation uses (e.g., fishing, wildlife-viewing, photography, environmental education and interpretation) in the South Stone Lake area, assuming they are found compatible with Refuge purposes and the mission of the NWRs. Current staffing and funding needs would remain the same. This alternative would also contribute to achieving the interim Refuge habitat and visitor use goals outlined in FEIS for the Refuge (USFWS 1992).

Alternative B – Waterfowl Hunt Program - Youth and Mobility-Impaired Opportunities Emphasized (Proposed Action)

Under this alternative, 912 acres in the South Stone Lake Unit of the Refuge would be open to waterfowl hunting (i.e., Sun River, Lodi Gun Club, LIC properties) as described in the Refuge Waterfowl Hunt Plan. Hunting would occur two days per week, Tuesday and Saturday from ½ hour before sunrise until 12:00 PM from opening day until the first Saturday in December. Thereafter hunting would occur three days per week: Tuesday, Thursday and Saturday from ½ hour before sunrise until 12:00 PM. The program would initially accommodate a minimum of 14 hunters on the Sun River property. But as funding and more facilities become available during the next five years (e.g., blinds, parking lots, access roads, boat launch areas), the program would

expand to include Lodi Gun Club and LIC units for a maximum of 26 hunters. Hunting would occur from spaced-blinds, adequately separated to ensure a safe and quality hunting experience. Hunting dogs for retrieval of birds would be allowed but must be under the control of their owners at all times. Some water blinds within the Sun River property would only be accessible by hand-launched, non-motorized boats (e.g., canoe, kayak, john boat) that must be provided by the hunter.

This alternative would emphasize providing a quality hunting experience for the hunter and hunting opportunities for youth and mobility-impaired hunters. Two blinds would be reserved for mobility-impaired hunters and two for youth hunters on any Saturday. Additional youth hunts would also be held either before or after the regular hunt season in accordance with state regulations. Hunters would be randomly selected for the program through an automated draw system cooperatively administered by the Service and California Department of Fish and Game. Before this recreational program could be formally opened to the public, the Service must prepare a compatibility determination that will evaluate the compatibility of this proposed use with Refuge purposes (see Section I; Purpose for Taking Action) and the mission of the NWRS. The opportunity for public review and comment of the compatibility determination is concurrent with release of this draft EA. This alternative would contribute to the interim Refuge habitat and visitor use goals outlined in the FEIS for the Refuge (USFWS 1992).

Following finalization of the Refuge CCP in 2005, other priority wildlife-dependent recreational uses (e.g., fishing, wildlife-observation, photography, environmental education, and interpretation) that may be accommodated in the South Stone Lake area would be scheduled on non-hunting days to ensure public safety and minimize conflicts between uses.

Alternative C – Waterfowl Hunt Program - Maximum General Public Hunting

Under this alternative, the Refuge would be open to waterfowl hunting in the South Stone Lake area (i.e., Sun River, Lodi Gun Club, LIC properties) as described in the Stone Lakes NWR Waterfowl Hunt Plan. The program would be similar to Alternative B, except hunting would occur three days per week, Tuesday, Thursday and Saturday during the entire waterfowl season from ½ hour before sunrise until sunset. In addition, no blinds would be reserved for youth hunters or mobility-impaired hunters. But two accessible blinds would be available for mobility-impaired hunters that were chosen through the random draw process.

Section III: AFFECTED ENVIRONMENT

Project Area

Stone Lakes NWR was established in 1994 as the 505th unit in the NWRS. The approved Refuge boundary encompasses 18,200 acres, including a core Refuge of approximately 9,000 acres and a 9,000-acre Cooperative Wildlife Management Area. At present, approximately 6,069 acres are actively managed by the Service through cooperative agreement (46%), conservation easement (25%), and fee title acquisition (29%). The Refuge is located in the Sacramento Valley of California in the southwestern part of Sacramento County and the northeastern Sacramento San Joaquin Delta (Delta). The approved Refuge boundary lies about 10 miles south of the City of Sacramento, straddling Interstate-5 from the town of Freeport south to Lost Slough (Figure 1). The natural habitats present within the current 6,069-acre Refuge consist approximately of: grasslands (3,834 acres), un-managed seasonal and permanent wetlands (645 acres), managed seasonal and permanent wetlands (435 acres), open water/aquatic beds (400 acres), riparian forest (360 acres), agricultural croplands (306 acres), and developed (89 acres).

When considering the 6,069 acres of the Refuge, the Service currently only has authority to propose a waterfowl hunting program for lands it owns in fee title (1,740 acres). The 912-acre South Stone Lake Unit is being considered for this program, because it supports waterfowl habitat in a large, contiguous block, is an adequate distance from residential development and Interstate 5, and has a history of providing hunting. Therefore, this program would occur on approximately 52 % of the Refuge acreage actually available to support a hunt program.

The South Stone Lake Unit consists of three properties: Sun River, Lodi Gun Club, and LIC. To the north of Service-owned lands are properties of two private landowners, Galen Whitney and Mark Serra; to the east are the properties of the Samra Family, Manual Corriea, and Vino Farms; to the south are properties of Sutter Home and Reclamation District 813; and to the west are lands owned by Galen Whitney, and Sutter Home. Both Lodi Gun Club and Sun River were managed historically as private duck hunting clubs. LIC was converted from farmland into a habitat mitigation site by the previous landowner and acquired by the Service in 2003.

The 537-acre Sun River property is adjacent to the north side of Lambert Road and east of the abandoned Southern Pacific Railroad. It supports 140 acres of irrigated pasture, 128 acres of managed seasonal wetlands, 84 acres of open water/aquatic beds, 81 acres of mixed riparian forest, 46 acres of permanent marsh, 36 acres of annual grasslands, and 22 acres of developed land. Lodi Gun Club and LIC, which are adjacent to and north of Sun River and also encompass a substantial portion of South Stone, would be available for hunting as funding and facilities become available. Lodi Gun Club and LIC support a variety of habitats, including: open water and aquatic beds, permanent and seasonal wetlands, and mixed riparian forest. Both Lodi Gun Club and Sun River have been managed as private duck hunting clubs and traditionally supported hunting since the early 20th century. The Lodi Gun Club supported approximately six members that hunted the club 3-5 days a week until the early 1990's. The Sun River site contains a number of hunting blinds and other infrastructure (e.g., gravel entrance road and one parking lot). As a private club, Sun River presently supports approximately two parties

of four hunters once or twice a week during waterfowl season. Historically, this club had from 6-10 members who hunted the property 3-5 days per week.

Current wildlife use levels on the 912-acre South Stone Lake Unit are substantial with 5,000-10,000 wintering waterfowl utilizing the area, depending on rainfall and local flooding. The overall Refuge supports more than 25,000 waterfowl during the peak wintering and migration periods. The area also supports two heron rookeries and use by other groups of migratory birds, such as shorebirds, pelicans and cormorants, landbirds, and raptors. Approximately 200 greater sandhill cranes also utilize the Sun River property for roosting, loafing and foraging. The portion of the Refuge proposed for this potential hunting program supports suitable habitat for the federally-threatened giant garter snake (GGS).

Both Sun River and Lodi Gun Club properties were surveyed by qualified archaeologists (Sikes *et al* 2002, Tremaine and Assoc. 1996). One previously-known prehistoric property (CA-SAC-145) exists at the northern boundary of Sun River. A site record for CA-SAC-145 was updated and the remainder of Sun River surveyed for the presence of any previously-unknown sites (Sikes *et al* 2002). Sikes *et al* (2002) also documented the presence of the Sun River levee on the property which may be eligible for the National Register of Historic Places.

Currently, more than 6,000 people per year visit the Refuge to participate in a variety of wildlife-dependent recreational activities. These include wildlife observation and photography, interpretation, and environmental education. These activities primarily occur north of Hood-Franklin Road on the Beach Lake and North Stone Lake Units of the Refuge, where a 3-mile trail system leads to a wildlife viewing platform. This trail system is currently open to visitors every second and fourth Saturday of each month. Throughout the year the Refuge hosts a number of special events for the general public, volunteers, and supporters. On the Lodi Gun Club, educational docent-led tours are offered to school, scout and other groups by special arrangement.

In summer 2005, the Refuge is proposing to begin construction of the Blue Heron Trails project which would result in approximately 240 acres of a variety of new habitats (e.g., native grasslands, riparian forest, seasonal and permanent wetlands) on the Headquarters Unit adjacent to Hood-Franklin Road. The project would eventually include mobility-impaired accessible trails, wildlife-viewing structures, an environmental education shelter, and interpretive exhibits. This new planned educational and interpretive focus area would be open seven days a week from dawn to dusk and be available to the public at approximately the same time as the beginning of this proposed Refuge hunting program.

Section IV: ENVIRONMENTAL CONSEQUENCES

Alternative A - No Action

Vegetation and Wildlife

Migratory birds such as waterfowl, shorebirds, herons and egrets, and sandhill cranes would continue to make use of the South Stone Lake Unit for foraging and roosting, particularly during the winter months when seasonal flooding would occur due to water management and flood events. Occasional instances of poaching or trespass would still occur, resulting in minimal disturbance to migratory and resident birds. No adverse impacts would occur to special status species, such as the GGS.

Cultural Resources

Since no use of the South Stone Lake Unit would occur by hunters, there would be no potential impacts to the known prehistoric or historic sites on the Sun River property.

Economic and Social Considerations

As a privately-owned property, the Sun River property presently supports approximately two parties of four hunters once or twice a week during waterfowl season. Under the No Action Alternative, conveyance of the Sun River property to the Service to be managed as part of the Refuge would still proceed. However, waterfowl hunting would no longer occur there. Therefore, there could be some small impact on the local economy due to lost revenues from sales of ammunition, food, etc. but no impacts would occur to adjacent landowners. Depending on the outcome of the Refuge CCP, other wildlife-dependent recreational uses such as fishing, wildlife observation, environmental education, and interpretation would either continue or be initiated in the vicinity of South Stone Lake and could have some beneficial effects on the local economy.

Land Use

Waterfowl hunting which occurred while the Sun River property was privately-owned would be discontinued under this alternative. Habitats presently occurring in South Stone Lake area such as open water, aquatic beds, perennial marsh, and riparian forest would continue to be maintained and managed for fish and wildlife.

Alternative B - Waterfowl Hunt Program - Youth and Mobility-Impaired Opportunities Emphasized (Proposed Action)

Vegetation and Wildlife

Under Federal law established by international treaties with Canada, Mexico and other countries with whom we share migratory birds, the Service has ultimate responsibility for regulating migratory bird hunting nationwide. The Service establishes the frameworks that govern all migratory bird hunting in the United States through a regulatory process that begins each year in January and includes public participation. Within the boundaries established by those frameworks, State wildlife commissions have the flexibility to determine season length, bag limits, and areas for migratory game bird hunting. The Refuge adopts harvest regulations set by Federal and State resource agencies that are derived from the concepts of density-

dependent compensatory mortality and adaptive harvest management to ensure game species populations are sustainable. As a result, the harvest of waterfowl during a three-day per week Refuge public hunting program would have a negligible effect on the overall population levels of the various species.

Establishing a public waterfowl hunting program on Sun River and including the Lodi Gun Club and LIC, could lead to some displacement of birds in the area occupied by hunting parties. Hunting could also cause flushing of other migratory and resident birds and lead to inadvertent or intentional take of non-target species. However, the potential detrimental effects on waterfowl populations, such as displacing of birds, would be minimal since the proposed hunting program would be limited to only two to three days per week; from ½ hour before sunrise until 12:00 PM. Moreover, limiting hunting to 15 % of the current Refuge land base (912 of 6,069 acres) would ensure the presence of adequate non-hunted areas to maintain and even allow for expansion of waterfowl populations as Refuge habitats are enhanced in the future. Finally, each day hunting is offered, Refuge staff would provide information to hunters about minimizing their potential impacts on non-target wildlife. No adverse impacts to wildlife or habitats are anticipated from dogs used for retrieval of waterfowl since they will be under the control of their owners at all times. A minor benefit of using dogs would be minimizing loss of downed birds. No impacts from use of boats by hunters are anticipated because boats will be hand-launched and introduction of invasive aquatic plants into Refuge waterways is unlikely.

The only federally-listed species that may be present on the Refuge during the waterfowl hunting season is the federally threatened, GGS. Since hunting would occur during the dormant period when snakes are occupying below-ground hibernacula, no adverse impacts should occur to this species from the hunting program (Appendix A – Informal Section 7 Consultation under the Endangered Species Act). As part of a programmatic Intra-Service Section 7 consultation regarding Refuge operations that will be prepared for the CCP, the Service will address the potential effects of routine habitat restoration and management and maintenance activities related to the proposed hunting program. As funding and staff are available, surveys will be conducted for GGS to better ascertain the status of the species on the Refuge. Depending on the results of biological monitoring, modifications to the hunting program may be implemented as appropriate.

State-listed species that inhabit the refuge include Swainson's hawk and greater sandhill crane. Swainson's hawks migrate to Mexico and South America during the winter months and therefore

would not be affected by waterfowl hunting. Greater sandhill cranes have been recorded roosting, loafing, and feeding throughout the Refuge and on the Sun River property during September through February, which generally coincides with the waterfowl hunting season. Under this proposed program, the number of days hunting would occur and times of day are intended to minimize disturbance to cranes. Cranes roost in seasonal wetlands at night, leaving before dawn to feed in surrounding agricultural fields and return to irrigated pastures around noon (G. Ivey, pers. comm.). Refuge staff would continue to monitor the cranes' response to hunting and would modify the hunting program as appropriate. Construction or maintenance of blinds and other infrastructure related to the proposed hunting program would be scheduled to minimize potential impacts to other biological resources (e.g., heron rookeries).

Cultural Resources

All prehistoric or historic sites near South Stone Lake would continue to be protected. CA-SAC-145 does not occur within the portion of Sun River proposed for a hunting program and the Sun River levee would not be affected by this proposed activity.

Economic and Social Considerations

An increase in Refuge visitors by 80 per week for waterfowl hunting could generate some additional revenues for businesses in local towns and cities (e.g., Elk Grove, Freeport, Hood, Franklin, and Walnut Grove). Administration of the proposed waterfowl hunting program under this alternative may exceed the existing management budget of the Refuge. However, the program could also lead to the Refuge receiving budget increases to expand station management capability and staffing. Additional funding and staff proposals related to this project would be entered into the Service's internal budget systems including Refuge Operating Needs System (RONS) and Maintenance Management System (MMS). In the event of no budget increases, the Refuge would seek assistance from the California Department of Fish and Game or California Waterfowl Association and other non-governmental organizations, to assist with operating the waterfowl hunting program.

Potential impacts to neighboring landowners, as a result of the proposed waterfowl hunting program could include possible trespass from hunters and minor increases in traffic. Even though some nearby landowners expressed concerns regarding hunters trespassing onto their land, the potential will be minimal because all hunters will be assigned a spaced-blind.

Lambert Road is a narrow two lane highway constructed on the top of a levee used by vehicles, farm equipment, and tractor trailers. Vehicles routinely travel over the 55 mph speed limit, making driving hazardous at times. The Refuge is consulting with Sacramento County Department of Transportation (DOT) and Federal Highway Administration to evaluate traffic requirements and to study the site and develop preliminary designs for new signage, lighting, gates, etc. to minimize the risk of accidents. These improvements would be designed to ensure safe ingress and egress to the property by Refuge visitors and discourage dumping, and other illegal activities. Refuge law enforcement would also regularly patrol the area to ensure the safety of visitors, hunter compliance, and discourage illegal activities (e.g., vandalism, littering, poaching, trespass).

A waterfowl hunt program at Stone Lakes NWR would provide hunting opportunities for a growing urban population close to Sacramento and contribute directly to refuge goals as defined in the FEIS (USFWS 1992). Reserving two blinds each Saturday for youth hunters and their escorts would provide a quality experience to these future hunters. Refuge staff received positive comments regarding youth hunts that California Waterfowl Association and Wildlands, Inc. offered on the Sun River property over the past two years when the property was under private ownership. Many of the adults remarked about the importance of providing an easily accessible and quality hunt for youth to learn about the art of duck hunting such as how to set decoys, calling, and gun safety. Over 25 persons registered for one of three blinds, indicating the great demand for youth hunting opportunities.

The demand for blinds for mobility impaired persons is greater than local availability. Although both the Cosumnes River Preserve to the south and the Sacramento National Wildlife to the north offer blinds for disabled persons, additional opportunities are needed (M. Ackerman, and Greg Mensik, pers. comm.). Under this proposal, two floating pontoon blinds would be reserved for mobility-impaired hunters each hunt day that could be pulled out and anchored by an able-bodied assistant.

Land Use

The proposed hunting program would be managed according to State and Federal laws, regulations, and policies. Waterfowl hunting which has occurred on 841 acres of Service-managed lands (i.e., Sun River property, Lodi Gun Club) while they were under private ownership, would continue under this alternative.

Alternative C - Waterfowl Hunt Program - Maximum General Public Hunting

Vegetation and Wildlife

The environmental impacts to vegetation and wildlife resources from a waterfowl hunting program under this alternative are anticipated to be slightly greater than those described under Alternative B because hunters would be on the property from dawn to dusk which could lead to greater displacement of birds in the immediate hunting area. Greater sandhill cranes that roost in the wetland units at night may be displaced by hunting activity as they arrive at dusk. Birds may also be displaced as they arrive back onto the property around noon, usually landing in the irrigated pastures, by people exiting the property. Expanded hunting hours could also cause greater disturbance to other migratory and resident birds such as white-faced ibis and lead to inadvertent or intentional take of non-target species. The harvest of migratory waterfowl under this alternative would have no effect on the overall population levels of the various species. Hunting success would likely be lower at the beginning of the season based on waterfowl surveys that indicate that peak waterfowl populations in this portion of the Central Valley occur in the months of December through February.

Cultural Resources

The environmental impacts to cultural resources from a waterfowl hunting program under this alternative are anticipated to be similar to those described under Alternative B.

Economic and Social Considerations

The environmental impacts to economic and social considerations from a waterfowl hunting program under this alternative are anticipated to be similar to those described under Alternative B. An increase in Refuge visitors by a maximum of 78 per week consisting of adult waterfowl hunters could generate slightly higher additional revenues for businesses in local towns and cities (e.g., Elk Grove, Freeport, Hood, Franklin, and Walnut Grove).

Land Use

The environmental impacts to land use from a waterfowl hunting program under this alternative are anticipated to be similar to those described under Alternative B.

Section V: CUMULATIVE IMPACTS

Cumulative impacts are environmental impacts resulting from the incremental impacts of a proposed action, when added to other past, present, and reasonably foreseeable future actions, both federal and non-federal. Due to the lack of quantitative information available for other projects and actions that may result in cumulative impacts, this discussion is primarily qualitative in nature.

Vegetation and Wildlife

A number of public waterfowl hunting programs presently occur on lands within the general region of Stone Lakes NWR. These include but are not limited to: Cosumnes River Preserve, Yolo Wildlife Area, various State holdings within the Delta, private duck hunting clubs in the Yolo Bypass and other parts of the Delta, and other national wildlife refuges in the Sacramento and San Joaquin valleys. As other habitat restorations or enhancements occur within the Delta through ongoing programs such as the Central Valley Habitat Joint Venture and Calfed Bay-Delta Authority, new hunting opportunities should become available in association with these projects. When considering the cumulative environmental impacts of these other programs in conjunction with the proposed Refuge hunting programs, waterfowl populations on the Refuge should not be adversely affected.

International treaties for the conservation of migratory birds mandate that protecting and maintaining overall populations be given a higher priority than harvesting of waterfowl. Waterfowl population goals are identified in the North American Waterfowl Management Plan and are formally endorsed by the federal governments of Canada, Mexico, and the U.S. to ensure the sustainability of hunting opportunities. The Service, state wildlife agencies, and federal and provincial governments in Canada have long-term cooperative programs that monitor breeding-population status, harvest levels, production, migration, and other parameters utilized for regulating harvests. A wide number of governmental entities and academic programs conduct important research to better understand waterfowl populations, including estimating survivorship and reproduction and predicting harvest impacts on populations.

The process of regulating waterfowl harvests involves a lengthy sequence of public involvement

and decision making. Participation by the Service, state wildlife agencies, the Canadian and Mexican governments, and the public occurs at numerous times during the regulatory cycle. The process involves assessment of waterfowl populations, publication of Federal Register notices, and numerous meetings by the Waterfowl Flyway Councils and Service Regulations Committee. It culminates in regulations being set at the flyway level (season lengths, daily bag limits, and outside dates for the earliest opening and latest closing dates for a hunting season) and special regulations at the state level (e.g., split seasons, harvest zones, special seasons, area closures).

As a result, the anticipated harvest of waterfowl during a three-day per week Refuge public hunting program should have a negligible effect on the overall population levels of the various species. Since over 55% of waterfowl habitat (wetlands, flood riparian) would not be open to hunting, there should be more than adequate non-hunting areas to support current Refuge waterfowl populations and to withstand the cumulative effects of off-refuge hunting programs. The non-hunted portions of the Refuge would also accommodate increased use by waterfowl populations as these habitats are enhanced in the future.

Cultural Resources

No cumulative impacts to cultural resources should result when considering the proposed action, in conjunction with other federal and non-federal actions in the past, present, and reasonably foreseeable future.

Economic and Social Considerations

No cumulative impacts to economic and social resources should result when considering the proposed action, in conjunction with other federal and non-federal actions in the past, present, and reasonably foreseeable future.

Land Use

No cumulative impacts to land use should result when considering the proposed action, in conjunction with other federal and non-federal actions in the past, present, and reasonably foreseeable future.

SUMMARY OF IMPACTS BY ALTERNATIVE:

| Impact Topics | <u>Alternative A</u> - No Action | <u>Alternative B</u> - Waterfowl Hunt Program - Youth and Mobility-Impaired Opportunities Emphasized (Proposed Action) | <u>Alternative C</u> - Waterfowl Hunt Program – Maximum General Public Hunting |
|---|---|--|---|
| Vegetation and Wildlife | No effect | Very slight to no effect | Very slight to slight effect – possible reduction in waterfowl use of the South Stone Lake Unit during the beginning of the hunt season if wetland acres are limited in the region. |
| Cultural Resources | No effect | No effect | No effect |
| Economic and Social Considerations | No effect | <p>Possibly increased revenue in nearby communities and expanded recreational opportunities. Possible minor increases in traffic.</p> <p>Necessitate minor increase in refuge funding to administer program.</p> <p>Very slight possibility of disturbance to greater sandhill cranes that feed, roost and loaf on the property.</p> | <p>Possibly increased revenue in nearby communities and expanded recreational opportunities. Possible minor increase in traffic.</p> <p>Necessitate substantial increase in refuge funding to administer program</p> <p>Possibility of disturbance of greater sandhill cranes that roost in the wetlands at night and feed and loaf in the irrigated pastures during the day.</p> |
| Land Use | Loss of existing hunting area | Expanded public hunting opportunities for general public and youth and mobility impaired hunters | Expanded public hunting opportunities |

Section VI: COMPLIANCE, CONSULTATION AND COORDINATION WITH OTHERS

A. List parties contacted during the planning process. Summarize results of consultation or coordination with these parties.

As detailed above in Section I (Scoping Process and Public Involvement), Refuge staff have met with a wide variety of stakeholders including, adjacent private landowners, ranchers, local agencies, elected officials, tribal organizations, and private non-profit and for profit organizations to solicit their views regarding this proposed project: John Baranek, Manual Correia, Chris Fulster, Tom Herzog, Walt Hoppe, LaRue Schock, Mark Serra, and Galen Whitney and; Sacramento County Supervisor Don Nottoli, U.S. representative Mike Thompson and former representative Doug Ose; Sacramento County Planning Department; Sacramento County Department of Water Resources; Reclamation District 813; Ione Band of Miwok Indians; Wildlands, Inc.; and California Waterfowl Association.

Interested individuals, organizations, and agencies were notified by mail on approximately November 17, 2004 regarding a 30-day comment period to review this draft EA, Waterfowl Hunt Plan, and Compatibility Determination for Waterfowl Hunting. To facilitate public review, all of these draft documents are accessible on the Refuge website (<http://stonelakes.fws.gov>) and at local libraries. Copies were provided upon request.

A total of 18 comments were received by phone, mail and e-mail. Comments received by phone equaled seven in favor of a hunting program and two opposed to any hunting. Comments received by mail and e-mail totaled seven in favor of hunting and two opposed. Most comments in favor of hunting requested expanding the program to three days and/or all day rather than half day, increasing the number of blinds and allowing hunters to refill and including other hunting such as dove, quail, pheasant. Those opposed to hunting felt the Refuge should remain as a sanctuary and be available for non consumptive uses (i.e. bird watching, hiking). The topic of hunting on the Refuge was also discussed in various chat forums including Elk Grove Online, DuckHunters.org, and refugeforums.com.

In response to comments received, hunting opportunities were expanded to three days per week after the first Saturday in December and the total number of hunters was increased from a minimum of 12 to 22 hunters per day to a minimum of 14 to 26 hunters per day. All parties commenting on the EA will be notified through direct mailing that the Finding of No Significant Impact is available upon request and posted on the Refuge website.

B. List pertinent laws, executive orders and regulations, and state how these have been complied with.

National Wildlife Refuge System Compatibility Policy (Fish and Wildlife Manual #360, Part 603 FW 2) – In compliance with the NWRS Compatibility Policy, a compatibility determination has been prepared for this proposed waterfowl hunting program. The CD is

provided for public review and comment concurrently with the 30-day comment period for this draft EA.

National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57) – In compliance with the NWRS Improvement Act of 1997, this waterfowl hunting program is being proposed in a manner that ensures that the biological integrity, diversity, and environmental health of the NWRS are maintained for the benefit of present and future generations of Americans.

Endangered Species Act – Suitable habitat exists for the federally-threatened giant garter snake (GGS) in the South Stone Lakes Unit. However, since hunting would coincide with the dormant period when snakes are occupying below-ground hibernacula (late October-March), there should be no effect to this species from the hunting program (Appendix A – Informal Section 7 Consultation for Endangered Species Act). All improvements (e.g., roads, parking lots, blinds) necessary for this proposed hunting program were previously constructed when the planned hunting area was in private ownership. As part of the Biological Opinion for the Programmatic Intra-Service Section 7 Consultation for routine Refuge operations that will be prepared for the CCP, the Service will address the potential effects of habitat restoration and regular management and maintenance activities related to the proposed hunting program. As funding and staff are available, surveys will be conducted for GGS to better ascertain the status of the species on the Refuge. Depending on the results of biological monitoring, modifications to the hunting program may be implemented, where appropriate.

National Historic Preservation Act – Both Sun River and Lodi Gun Club properties were surveyed by qualified archaeologists (Sikes *et al* 2002, Tremaine and Assoc. 1996). One previously-known prehistoric property (CA-SAC-145) occurs at the northern boundary of Sun River. A site record for CA-SAC-145 was updated and the remainder of Sun River surveyed for the presence of any previously-unknown sites (Sikes *et al* 2002). Sikes *et al* (2002) also documented the presence of the Sun River levee on the property which may be eligible for the National Register of Historic Places. This proposed hunting program would be conducted in a manner that ensures compliance with cultural resource laws and protection of all prehistoric or historic sites. CA-SAC-145 does not occur within the portion of Sun River proposed for a hunting program and the Sun River levee would not be affected by this proposed activity.

Section VII: REFERENCES.

Gary Ivey. Personal Communication, Private Consultant.

Greg Mensik. Personal Communication. Sacramento National Wildlife Refuge Complex.

Mark Ackerman. Personal Communication. Cosumnes River Preserve.

Sikes, N.E., M. Armstrong, and K.J. Tremaine. 2002. Archaeotechnical Survey Report for the Sun River Habitat Restoration Project in Sacramento County, California. Tremaine and

Associates, Inc., Dixon, California. Submitted to Wildlands, Inc., Citrus Heights, California.

Tremaine & Associates, Inc. 1996. Archaeological Survey for the Proposed Southern Pacific Railroad Borrow Channel Maintenance Project Associated with the Stone Lakes National Wildlife Refuge, Sacramento County, California. Prepared for U.S. Fish and Wildlife Service; 4 pp. plus figures.

U.S. Fish and Wildlife Service. 1992. Final Environmental Impact Statement - Stone Lakes National Wildlife Refuge, Sacramento County, California. Prepared for U.S. Fish and Wildlife Service by Jones and Stokes Associates, Inc.